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Application Number	10650585
Filing Date	2003-08-28
First Named Inventor	Daniel Lamarre
Art Unit	1648
Examiner Name	Li, Bao Q.
Attorney Docket Number	13/082-1-D1

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Application Number	10/650,585
Filing Date	August 28, 2003
First Named Inventor	Thibeault, D. et al
Art Unit	To be assigned
Examiner Name	To be assigned
Attorney Docket Number	13/082-1-D1

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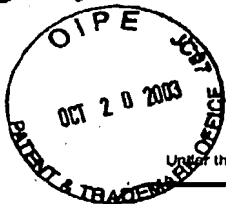
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Sheet 2 of 2

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M.M. ↓		LILIANA CHEMELLO ET AL; The effect of interferon alfa and ribavirin combination therapy in naive patients with chronic hepatitis C; Journal of Hepatology 1995; Vol. 23 (suppl.2) page 8-12; Issue number 0169-5185; Clinica Medica 2 and Anatomia Patologica, University of Padova, Italy	
		M. WENZEL ET AL; Establishment of a Cell-based Assay for Evaluation of Compounds against HCV NS2-3 Protease Activity; Session 8.H. Paper 91; 1999 page 409; XP-001041586	
		LUISA PIERONI ET AL; In Vitro Study of the NS2-3 Protease of Hepatitis C Virus; Journal of Virology 9/1997 page 6373-6380 Vol. 71 No. 9; American Society for Microbiology	
		PAUL L. DRAKE ET AL; Inhibition of Hepatitis C Virus NS2/3 processing by NS4A peptides; The Journal of Biological Chemistry; 1999, Vol. 274 No. 49 page 34511-34514; The American Society for Biochemistry and Molecular Biology, Inc. USA	
		KAREN E. REED ET AL; Hepatitis C Virus-Encoded NS2-3 Protease: Cleavage-Site Mutagenesis and Requirements for Bimolecular Cleavage; Journal of Virology 7/1995 Vol. 69 No. 7 page 4127-4136; American Society for Microbiology	
		ELISA SANTOLINI ET AL; The NS2 Protein of Hepatitis C Virus Is a Transmembrane Polypeptide; Journal of Virology 12/1995 Vol. 69 No. 12 page 7461-7471; American Society for Microbiology	
		DIANE THIBEAULT ET AL; In Vitro Characterization of a Purified NS2/3 Protease Variant of Hepatitis C Virus; The Journal of Biological Chemistry; 12/2001, Vol. 276 No. 49 page 46678-46684; The American Society for Biochemistry and Molecular Biology, Inc.	
		Copy of International Search Report for PCT/CA 01/01786	
		Boagur L: 5/17/2007	

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			Application Number	To be assigned	
			Filing Date	August 28, 2003	
			First Named Inventor	Thibeault, Diane	
			Group Art Unit	1648	
Examiner Name	To be assigned				
Sheet	1	of	4	Attorney Docket Number	13/082-1-D1

U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ^a (if known)			
MM	AUS1	5,714,371		Ramanathan	02-03-1998	
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		Office	Number	Kind Code (if known)				
MM ↓	AF1		WO 01/16379		Merck & Co., Inc.	03-08-2001		<input type="checkbox"/>
	AF2		WO 01/68818		ISTI-TUTO DI Ricerche Di Biologia Molecolare P. Angeletti	09-20-2001		<input type="checkbox"/>
	AF3		WO 99/07733		Boehringer Ingelheim Canada Ltd.	02-18-1999		<input type="checkbox"/>
	AF4		WO 97/08304		Istituto Di Ricerche Di Biologia Molecolare S.P.A.	03-06-1997		<input type="checkbox"/>
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	AF9							<input type="checkbox"/>
	AF10							<input type="checkbox"/>

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		Application Number	To be assigned		
		Filing Date	August 28, 2003		
		First Named Inventor	Thibeault, Diane		
		Group Art Unit	1648		
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Sheet	2	of	4	Attorney Docket Number	13/082-1-D1

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mm	AO1	CHIRGWIN, PRZYBYLA et al.; Isolation of Biologically Active Ribonucleic Acid from Sources Enriched in Ribonuclease; Biochemistry; 1979, v. 18; 5294-5299	<input type="checkbox"/>
	AO2	DARKE, JACOBS et al.; Inhibition of Hepatitis C Virus NS2/3 Processing by NS4A Peptides; J. Biol. Chem.; 1999, V. 274, No. 49; 34511-34514	<input type="checkbox"/>
	AO3	GRAKOU, MCCOURT et al.; A second hepatitis C virus-encoded proteinase; Proc. Natl. Acad. Sci. USA; 1993, V. 90; 10583-10587	<input type="checkbox"/>
	AO4	KOLYKHALVO, MIHALIK et al.; Hepatitis C Virus-Encoded Enzymatic Activities and Conserved RNA Elements in the 3' Nontranslated Region are Essential for Virus Replication In Vivo; 2000, V. 74, No. 4; 2046-2051	<input type="checkbox"/>
	AO5	LIN, TIMASHEFF; On the role of surface tension in the stabilization of globular proteins; Protein Sci.; 1996, V. 5; 372-381	<input type="checkbox"/>
	AO6	LIU, BHAT et al.; The Hepatitis C Virus NS2 Protein Generated by NS2-3 Autocleavage is Required for NSSA Phosphorylation; Biochem. Biophys. Res. Commun.; 1999, V. 254; 572-577	<input type="checkbox"/>
	AO7	NEDDERMANN, CLEMENTI et al.; Hyperphosphorylation of the Hepatitis C Virus NS5A Protein Requires an Active NS3 Protease, NS4A, NS4B, and NS5A Encoded on the Same Polyprotein; J. Virol.; 1999, V. 73, No. 12; 9984-9991	<input type="checkbox"/>
	AO8	PALLAORO, LAHM et al.; Characterization of the Hepatitis C Virus NS2/3 Processing Reaction by Using a Purified Precursor Protein; J. Virol.; 2001, V. 75, No. 20; 9939-9946	<input type="checkbox"/>
	AO9	PIERONI, SANTOLINI et al.; In Vitro Study of the NS2-3 Protease of Hepatitis C Virus; J. Virol.; 1997, V. 71, No. 9; 6373-6380	<input type="checkbox"/>
	AO10	REED, GRAKOU et al.; Hepatitis C Virus-Encoded NS2-3 Protease: Cleavage-Site Mutagenesis and Requirements for Bimolecular Cleavage; J. Virol.; 1995, V. 69, No. 7; 4127-4136	<input type="checkbox"/>
	AO11	SANTOLINI, PACINI et al.; The NS2 Protein of Hepatitis C Virus is a Transmembrane Polypeptide; J. Virol.; 1995, V. 69, No. 12; 7461-7471	<input type="checkbox"/>

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	AO2	WALKER, M.A.; Hepatitis C virus: an overview of current approaches and progress; Drug Discovery Today; 1999; V. 4, No. 11; 518-529	<input type="checkbox"/>
	AO3	DYMOCK, JONES et al.; Novel approaches to the treatment of hepatitis C virus infection; Antiviral Chemistry & Chemotherapy; 2000; V. 11(2); 79-96	<input type="checkbox"/>
	AO4	GORBALENYA, SNIJDER; Viral cysteine proteinases; Perspect. Drug Discovery Design; 1996; V. 6; 64-86	<input type="checkbox"/>
	AO5	HIJIKATA, MIZUSHIMA et al.; Two Distinct Proteinase Activities Required for the Processing of a Putative Nonstructural Precursor Protein of Hepatitis C Virus; J. Virol; 1993; V. 67, No. 8; 4665-4675	<input type="checkbox"/>
	AO6	HIROWATARI, HIJIKATA et al.; Two proteinase activities in HCV polypeptide expressed in insect cells using baculovirus vector; Arch. Virol.; 1993; V. 133; 349-356	<input type="checkbox"/>
	AO7	KOMODA, HIJIKATA et al.; Processing of hepatitis C viral polyprotein in Escherichia coli; Gene; 1994; V. 145; 221-226	<input type="checkbox"/>
	AO8	WADA, WADA et al.; Codon usage tabulated from the GenBank genetic sequence data; Nuc. Acids Research; 1992; V. 20; 2111-2118	<input type="checkbox"/>
	AO9	WONG, ALBRIGHT, et al.; Immobilized Metal Ion Affinity Chromatography (IMAC) - Chemistry and Bioseparation Applications; Separation and Purification Methods; 1991; V. 20(1); 49-106	<input type="checkbox"/>
	AO10	AUSUBEL, BRENT et al.; Current Protocols in Molecular Biology; 1994; Vol. 1, 2, 3 and 4; Wiley, New York	<input type="checkbox"/>
	AO11	SAMBROOK, FRITSCH et al.; Molecular Cloning - A Laboratory Manual, Second Edition; 1989; Cold Spring Harbor Laboratory Press	<input type="checkbox"/>

Examiner Signature	<i>Mosley</i>	Date Considered	- 5 - 26 - 05
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I	AO2	WENZEL, TROXELL et al.; Establishment of a Cell-Based Assay for Evaluation of Compounds against HCV NS2-3 Protease Activity; Prog. & Abstr. Interscience Conf. Antimicrobial Agents & Chemo.; 1995; V. 39; 409 (1999)	<input type="checkbox"/>
↓	AO3	PCT International Search Report of PCT/CA 01/01796 International Filing Date Dec. 13, 2001	<input type="checkbox"/>
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	AO5		<input type="checkbox"/>
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	AO10		<input type="checkbox"/>
	AO11		<input type="checkbox"/>

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First Named Inventor

Diane THIBEAULT

Art Unit

1648

Examiner Name

Mary Mosher

Attorney Docket Number

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MM		C. STEINKUEHLER, ET AL., In vitro activity of purified HCV NS2/3 protease, 7th International Meeting on Hepatitis C and Related Viruses (molecular Virology and Pathogenesis), Dec. 3-7, 2000, Australia.	
MM		M. D. RYAN et al., Hepatitis C virus endopeptidase 2, Family U39, Article No. 567, pp 1600-1604 (1998)	
MM		Y. HIROWATARI et al., A novel method for analysis of viral proteinase activity encoded by Hepatitis C Virus in Cultured Cells, Analytical Biochemistry 225, p 113-120 (1995)	
MM		Z. WU et al., Mechanism of autoproteolysis at the NS2-NS3 junction of the hepatitis C virus polyprotein, TIBS 23 - March 1998, p 92-94.	

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